

## ORD's Office of Science Policy Environmental Futures Program

Factsbeet

ORD will evaluate opportunities for and, as appropriate, will conduct research to anticipate and assess future environmental stressors—whether human health or ecological—before their effects adversely impact people or the environment.

-Goal 5 of U.S. EPA's Office of Research and Development's Strategic Plan

In 1995, EPA's Science Advisory Board published a report, *Beyond the Horizon: Using Foresight to Protect the Environmental Future* calling for an EPA-led national effort to anticipate and respond to environmental change. The Board stated that "by engaging in environmental foresight, the American people can better understand the full range of risks and opportunities—environmental and economic—possible in the future and then better define the actions needed today to reduce the risks and preserve the opportunities."

## **Program Goal**

ORD's goal is to foresee future environmental stressors and understand or reasonably predict their potential impacts so that EPA can take action to prevent or avoid these impacts rather than just respond to them. Under this goal, we are building capacity to develop a systematic "foresight" effort focused on potential issues 10 to 20 years into the future.

## **Program Activities**

To support EPA in this endeavor, some of the Environmental Futures Activities include:

- Entering into a cooperative agreement with the Woodrow Wilson Center for International Scholars. Through the Center, ORD has access to eminent scholars, government policymakers, and private-sector executives to identify early signals of future environmental risks and opportunities, and to explore various methods in futures analysis. The initial collaboration with the Wilson Center has focused on the applications of genomic and proteomic technologies on environmental protection.
- Partnering with Pennsylvania's Department of Environmental Protection to develop its capability to conduct local environmental forecasting.
- Developing a Web-based Environmental Scanning System to scour the various media for: (1) early warning signals to extrapolate into the future, and (2) new issues for which an early warning signal does not currently exist.
- Funding research proposals to investigate the environmental applications of nanotechnology, the science of manipulating materials at the sub-molecular level.

For more information about the Environmental Futures Program, visit our Web site at http://www.epa.gov/ord/futures or call Anita Street at (202) 564-3626.

